

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M115847	Client:	Alaskan Copper Works
Date Received:	03/01/07	Project:	PO# M115847, F&BI 703014
Date Extracted:	03/02/07	Lab ID:	703014-01 x10
Date Analyzed:	03/05/07	Data File:	703014-01 x10.056
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	HR

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	121	60	125
Indium	116	60	125
Bismuth	101	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	530
Nickel	356
Copper	190 J
Zinc	47.6 J

J - The LCS associated with the analyte is out of control limits. The reported value should be considered an estimate.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Alaskan Copper Works
Date Received:	Not Applicable	Project:	PO# M115847, F&BI 703014
Date Extracted:	03/02/07	Lab ID:	I7-79 mb
Date Analyzed:	03/05/07	Data File:	I7-79 mb.024
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	HR

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	111	60	125
Indium	117	60	125
Bismuth	121	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Nickel	<1
Copper	<1
Zinc	<2

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ENVIRONMENTAL CHEMISTS

Date of Report: 03/08/07

Date Received: 03/01/07

Project: 8600 Acid Tank, PO# M115847, F&BI 703014

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS BY EPA METHOD 200.8

Laboratory Code: 702289-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/kg (ppm)	2.41	2.43	1	0-20
Nickel	mg/kg (ppm)	6.33	6.36	0	0-20
Copper	mg/kg (ppm)	10.4	11.4	9	0-20
Zinc	mg/kg (ppm)	16.0	18.4	14	0-20

Laboratory Code: 702289-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Chromium	mg/kg (ppm)	20	2.41	97	50-150
Nickel	mg/kg (ppm)	20	6.33	98 b	50-150
Copper	mg/kg (ppm)	20	10.4	100 b	50-150
Zinc	mg/kg (ppm)	50	16.0	104 b	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	mg/kg (ppm)	20	130	70-130
Nickel	mg/kg (ppm)	20	127	70-130
Copper	mg/kg (ppm)	20	131 vo	70-130
Zinc	mg/kg (ppm)	50	133 vo	70-130

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

vo - The value reported fell outside the control limits established for this analyte.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

March 8, 2007



INVOICE # 07ACU0308-2

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project 8600 Acid Tank, PO# M115847, F&BI 703014 - Results of testing
requested by Gerry Thompson for material submitted on March 1, 2007.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 200.8 @ \$80 per sample	\$ 80.00
Rush Charges (4 day) 60% of \$80.00	<u>48.00</u>
Amount Due	\$ 128.00

FEDERAL TAX ID # (b) (6)

703014

SAMPLE CHAIN OF CUSTODY

ME 03/01/07

AT4

Send Report To Gerard Thompson
 Company Alaska Copper Works
 Address 628 S. Harvard St
 City, State, ZIP Seattle WA 98134
 Phone # 206-571-6033 Fax # 206-382-4309

SAMPLERS (signature)

PROJECT NAME/NO.

metro self monitor

PO #

M115847

REMARKS

Page # _____ of _____

TURNAROUND TIME

☐ Standard (2 Weeks)☒ RUSH 4 days

Rush charges authorized by: _____

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Chl, Cu, Ni, Zn				
M115847	01	3/1/07	12:30	H2O	1							X				

Friedman & Bruya, Inc.
 3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\COC.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Gerard Thompson</u>	<u>Acw</u>	<u>3/1/07</u>	<u>1:23pm</u>
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FeBI</u>	<u>3/1/07</u>	<u>1:23</u>
Relinquished by:				
Received by:				

Samples received at 18 °C

FRIEDMAN & BRUYA, INC.

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March 8, 2007

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on March 1, 2007 from the 8600 Acid Tank, PO# M115847, F&BI 703014 project. There are 3 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ACU0308R